

Technical sheet :

# **MC 18-4 ST5**

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|       | Technical characteristics  |           | Metric                               |
|-------|--|-----------|--------------------------------------|
| 1.1   | Manufacturer   |           | Manitou                              |
| 1.2   | Model Name   |           | MC 18-4 ST5                          |
| 1.3   | Power source   |           | Diesel                               |
| 1.4   | Operator type  |           | Seated                               |
| 1.5   | Max. capacity  | Q         | 1800 kg                              |
| 1.6   | Load center of gravity   | c         | 500 mm                               |
| 1.8   | Load distance, centre of drive axle to fork  | x         | 616 mm                               |
| 1.9   | Wheelbase  | y         | 1900 mm                              |
|       | <b>Weight</b>  |           |                                      |
|       | Standard mast reference of the machine   |           | FVD 33                               |
| 2.1   | Service weight   |           | 3590 kg                              |
| 2.2   | Weight on front axle (laden) / rear axle (laden)   |           | 4670 kg / 720 kg                     |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)                                     |           | 1660 kg / 1930 kg                    |
|       | <b>Wheels</b>  |           |                                      |
| 3.1   | Tires type   |           | Pneumatic                            |
| 3.2   | Dimensions of front wheels   |           | 12,5/80-18/12 SL R4                  |
| 3.3   | Dimensions of rear wheels  |           | 27x10-12 SKS                         |
| 3.5   | Number of front wheels / rear wheels   |           | 2 / 2                                |
| 3.5.2 | Number of drive wheels   |           | 4                                    |
| 3.6   | Front wheel gauge  | b10       | 1159 mm                              |
| 3.7   | Rear wheel gauge   | b11       | 1176 mm                              |
|       | <b>Dimensions</b>  |           |                                      |
| 4.7   | Height of overhead guard (cabin) / Overall height of low overhead guard (Buggie version) | h6 / h6*  | 2155 mm / 1990 mm                    |
| 4.8   | Seat height/stand height   | h7        | 1094 mm                              |
| 4.19  | Overall length   | l1        | 4100 mm                              |
| 4.20  | Length to face of forks  | l2        | 2950 mm                              |
| 4.21  | Overall width  | b1        | 1450 mm                              |
| 4.22  | Forks section x width x length   | s / e / l | 35 mm x 100 mm / 1150 mm             |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B  |           | 2A                                   |
| 4.24  | Fork carriage width  | b3        | 1260 mm                              |
| 4.31  | Ground clearance below mast  | m1        | 300 mm                               |
| 4.32  | Ground clearance at centre of wheelbase  | m2        | 310 mm                               |
| 4.35  | Turning radius   | Wa        | 3370 mm                              |
|       | <b>Performances</b>  |           |                                      |
| 5.1   | Travel speed (laden / unladen)   |           | 12 km/h / 23.50 km/h                 |
| 5.2   | Lifting speed (laden / unladen)  |           | 0.44 m/s / 0.44 m/s                  |
| 5.3   | Lowering speed (laden / unladen)   |           | 0.40 m/s / 0.40 m/s                  |
| 5.5   | Drawbar pull (Laden)   |           | 1800 daN                             |
| 5.7   | Gradeability (laden)   |           | 35 %                                 |
| 5.10  | Service brake  |           | Hydraulic brakes by loss of pressure |
|       | Transmission type  |           | Hydrostatic                          |
|       | <b>Engine</b>  |           |                                      |
| 7.1   | Engine brand / model / norm  |           | Kubota / D1803 CRE5B / Stage V       |
| 7.2   | Engine power (Hp / kW)   |           | 37 Hp/27 kW                          |
| 7.3   | Rated speed  |           | 2700 rpm                             |
| 7.4   | Number of cylinders / Capacity of cylinders  |           | 3 - 1826 cm³                         |
|       | <b>Miscellaneous</b>   |           |                                      |
| 8.1   | Type of drive control  |           | Electronic                           |
| 8.2   | Working hydraulic pressure for attachments   |           | 160 bar                              |
| 8.3   | Oil flow rate for attachments  |           | 31 l/min                             |

## MC 18-4 ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                              |    | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|---|----|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                      | °  | 12     | 12     | 12     | 12     |
| β - Mast/fork carriage tilt, backward                     | °  | 10     | 10     | 10     | 10     |
| h1 - Mast lowered height                                  | mm | 2348   | 2608   | 2798   | 3048   |
| h2 - Mast free lift                                       | mm | 85     | 85     | 85     | 85     |
| h3 - Mast lifting height                                  | mm | 3300   | 3700   | 4000   | 4500   |
| h4 - Mast extended height                                 | mm | 4018   | 4428   | 4768   | 5268   |
| Residual capacity at max height                           | kg | 1800   | 1800   |        | 1100   |
| Residual capacity with hooked-on side shift at max height | kg | 1800   | 1800   |        | 1100   |
| Height at max capacity                                    | mm | 3300   | 3700   |        | 3600   |
| Height at max capacity with hooked-on sideshift           | mm | 3300   | 3700   |        | 3600   |

| Free Lift Triplex (FLT)                                   |    | FLT 37 | FLT 43 | FLT 47 | FLT 55 |
|---|----|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                      | °  | 12     | 12     | 12     | 6      |
| β - Mast/fork carriage tilt, backward                     | °  | 10     | 10     | 10     | 6      |
| h1 - Mast lowered height                                  | mm | 1998   | 2198   | 2348   | 2608   |
| h2 - Mast free lift                                       | mm | 1305   | 1505   | 1655   | 1915   |
| h3 - Mast lifting height                                  | mm | 3700   | 4300   | 4700   | 5500   |
| h4 - Mast extended height                                 | mm | 4453   | 5053   | 5453   | 6253   |
| Residual capacity at max height                           | kg | 1600   | 1000   | 600    |        |
| Residual capacity with hooked-on side shift at max height | kg | 1550   | 1000   | 600    |        |
| Height at max capacity                                    | mm | 3400   | 3400   | 3400   |        |
| Height at max capacity with hooked-on sideshift           | mm | 3300   | 3400   | 3400   |        |

| Full Visibility Triplex (FVT)                             |    | FVT 33 |
|---|----|--------|
| α - Mast/fork carriage tilt, forward                      | °  | 12     |
| β - Mast/fork carriage tilt, backward                     | °  | 10     |
| h1 - Mast lowered height                                  | mm | 1888   |
| h2 - Mast free lift                                       | mm | 135    |
| h3 - Mast lifting height                                  | mm | 3300   |
| h4 - Mast extended height                                 | mm | 4048   |
| Residual capacity at max height                           | kg | 1800   |
| Residual capacity with hooked-on side shift at max height | kg | 1800   |
| Height at max capacity                                    | mm | 3300   |
| Height at max capacity with hooked-on sideshift           | mm | 3300   |

## Equipment

| Standard   |
|--|
| Differential Lock  |
| Distributor with lever in cross - 2 hydraulic movements                |
| Ecotop   |
| Front tires - SOLIDEAL - SL-R4 - 12.5/80 R18 12-Ply - Rough terrain    |
| Mechanical suspension vinyl seat - PILOT                               |
| Rear tires - SOLIDEAL - XTRA SKS - 27x10-12 R12 12-Ply - Rough terrain |
| Optional   |
| 4th hydraulic movement   |
| Air suspension fabric seat - GRAMMER                                   |
| Closed cab   |
| Electrovalve 3 hydraulic functions on the top of the boom              |
| Enclosed cab buggy version   |
| Joystick Switch and Move (JSM)   |
| LED Rotative Beacon  |
| LED front work lights (x2)   |
| Load backrest  |
| Open cab buggy version   |
| Radio  |



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